DOCUMENT RESUME

ED 032 872 JC 690 346

By-Knoell, Dorothy M.; And Others
Researchers View Junior College Students.
American Association of Junior Colleges, Washington, D.C.; California Univ., Los Angeles. ERIC Clearinghouse for Junior Coll. Information.
Pub Date Oct 69
Note-16p.
Journal Cit-Junior College Research Review; v4 n2 Oct 1969
EDRS Price MF-$0.25 HC-$0.90
Descriptors-*Junior Colleges, *Student Characteristics

This review covers five views of junior college students. Dorothy Knoell reminds the college of its growing community service function. It must be ready for several student clienteles with changing needs, interests, activities, and values: for the under-educated of all ages; and for those special populations not served by other schools, all without neglecting its current students. Barbara Thomas discusses problems (and possible solutions) in student assessment. Late-enrolling students, requiring post-admission tests, make program planning difficult. Lack of such testing affects retention/attrition rates, placement, and teacher workload. C. E. Glenister examines 2- and 4-year students on six points of the Study of Values Scale. The differences between men's and women's values at the junior college are noted. Staff, administration, faculty, and personnel workers should consider them in selecting more effective programs and teaching methods. Terry O'Banion considers the problems of students' transfer shock (academic and emotional), including lack of counseling, low self-esteem, solidified social groups, lack of money, admission and evaluation policies, repeated testing, and doubtful prerequisites. James W. Trent urges a systematic evaluation of the junior college and its programs to understand the dynamics of the variety of institutions and students and to find principles and techniques useful to other colleges at least cost. He describes two relevant projects. (HH)

EDO 32872

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

ERIC

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

Volume 4, Number 2

JUNIOR COLLEGE RESEARCH REVIEW

October 1969

Published by the American Association of Junior Colleges

RESEARCHERS VIEW JUNIOR COLLEGE STUDENTS

POTENTIAL STUDENT CLIENTELES
by Dorothy M. Knoell
Page 2

STUDENT ASSESSMENT
by Barbara Thomas
Page 6

COMPARISON OF VALUES
by Carl E. Glenister
Page 8

TRANSFER STUDENTS
by Terry O'Banion
Page 10

CIRCLE OF EVALUATION
by James W. Trent
Page 13

JC 690 346

STUDYING POTENTIAL STUDENT CLIENTELES

The implicit disavowal of the research function in the community-junior college has not inhibited its growth in the last decade, but has surely contributed to the sometimes chaotic nature of its development. There is no reason to doubt the prediction of continuing, rapid growth of the public two-year college, in enrollment, size of staff, number of campuses, and breadth of programs and services. The absence of a good research base for community college planning has necessitated the use of linear, *status quo* projections of growth that occasionally produce absurd or economically unsound estimates of quantitative measures needed in planning.

Much research is being proposed and some is now being undertaken to assess the effects of education in the community college on the young people who are attending in rapidly increasing numbers. National higher education agencies and testing companies have rather recently given the two-year colleges a strong assist in conducting both survey and prediction studies of their incoming students, using standardized instruments. Biographical inventories, interest and value indices, aptitude and placement tests, and institutional self-study instruments are all available, with research and analysis services offered as part of the program. Too, government agencies are increasing their reporting requirements for colleges with any type of federal funding. Their demands can be expected to grow as they continue to examine the need for increased federal funds for the colleges. The National Center for Educational Statistics may be expected to play an important leadership role in nationwide data collection, within the guidelines for assuring the privacy of student records. Management information systems are being developed regionally and often in state and local units to facilitate the analysis of data for decision-making in the colleges.

None of this is meant to imply that the two-year colleges are now giving adequate attention to research on their local programs and operations, least of all on their impact on students. There are some portents of progress in this area of research that make it advisable to consider turning to a new start-up research program. The future that will be constructed for the community colleges will be totally unsatisfactory in an era of universal opportunity for post-secondary education unless a new start in research is made almost immediately. The research to be proposed as necessary and feasible for each college has two major thrusts. The first is a kind of in-depth educational census of the college-age youth and adults in the community or region served by the college. The second involves the analysis of the multiple educational needs of the several clienteles the college might serve.

It is unlikely that the community colleges will have either the funds or the desire to be "all things to all people," as the proposed research emphasis might imply. Instead, the local college should take the initiative in accomplishing the research so necessary both for cooperative planning among post-secondary institutions and for setting its own priorities among the possible clienteles and program functions. Community survey and feasibility studies leading to the establishment of community colleges are not new, of course. However, they have tended to produce stereotyped findings and conclusions, which scarcely justify their repetition in the race to establish a new community college each week. Similarly, college-initiated studies of potential students are not new. Local high school graduation rates, grade progression ratios, birth rates, and the like are examined in an attempt to predict future enrollments. However, the projections are based on *status quo* assumptions about the complexion of the college service area, and often about the very nature of the college (except, of course, its size and possibly the location of future campuses).

Research on potential college clienteles and their educational needs can be a cooperative endeavor involving the college faculty, staff, and, above all, the students themselves. Community college students can be trained to do interviewing, coding of data, elementary statistical analysis, and, in general, to serve as research aides supervised by faculty with appropriate qualifications and interest in such activities. Professional research direction is needed, of course, if the research is to rise above the sheer activity ("doing") level which characterizes many community surveys. An important asset of the student-researchers is their identification with the community that is the college service area—their familiarity with the schools, knowledge of the local subcultures, and acceptance by the residents when they continue to live in the neighborhoods. Minority groups in particular resent being studied by white outsiders, but can and will communicate with student-research assistants who share their concerns.

Starting with their current involvement in studies of students and programs, the community colleges might move first to study the needs and characteristics of their potential student clienteles, and then, in ever widening circles, to assess their present and possible effects in providing opportunity to them.

Assumptions for Planning

The following philosophic assumptions may be useful, if not wholly essential, in constructing a framework for community college research.

1. The percentage of college-age youth enrolled in some type of post-secondary program will continue to grow and the proportion attending a community college will increase over time as a function of the addition of programs and increased accessibility.
2. Adult students, including school dropouts, will constitute an ever-larger segment of the community college

by Dorothy M. Knoell

American Association of Junior Colleges

enrollments in a variety of programs ranging from basic education to retraining for employment, parent-child development, and self-realization.

3. The distinction between "occupational" and "transfer" students is antiquated, since almost all students plan to work within a few years after entering community college (if they are not already employed), very often after only one year in college.
4. All but a few students are dropouts from higher education at some point in time – many after high school, about half again as many after one year of college, and nearly all before the doctorate or highest level professional degree. Most students drop out sooner than they expect at the time they enter the community college.
5. Irrespective of the level of education they have achieved, most dropouts will need some further formal education during their lifetime, for upgrading, retraining, refreshment, self-fulfillment, or other reasons.
6. Community college students want as many options kept open to them as possible, for as long as possible, in terms of both occupational and educational choice. Their apparent preference for liberal arts transfer programs reflects this desire to keep the options open even after entering college.

A number of operating assumptions are essential to the design of studies to assist in constructing the future educational opportunity to be offered by community colleges.

1. Certain geographic service areas can be defined for the community colleges, for which they may design studies of the needs of their potential clienteles.
2. Community colleges have responsibility for meeting the educational needs of adults, some of whom will be school or college dropouts, and many of whom will have received their public school education outside the college service area.
3. The colleges can no longer afford to be inactive in research about and service to their community, nor should they be naively colorblind and non-class-conscious in assessing how well they are serving the community.
4. The multiple educational needs of potential students must become the focus of research by the colleges, to a degree at least equal to the attention given to research on the manpower needs of employers and society at large.
5. The colleges will continue to meet the needs of their students and the community for occupational education, but will also be concerned with improving the functioning of the students in their multiple adult roles as parent, householder, consumer, and citizen.
6. Research can help the college planners and decision-makers by providing data about the probable appropriateness of extending opportunity to certain groups of new students, the expected effectiveness under conditions of improved services and/or instruction, and the size and nature of groups that would benefit by entirely new programs and services.

Some Designs for Study

Assuming at each college some minimum on-going program of research on its enrolled students, attention will focus on the design of studies of potential student clienteles in the college service area, and of studies of the unmet needs of the area for educational opportunity beyond the high school. Each set of studies might be described as concentric circles, starting with the clienteles most likely to become students at the college, and the functions already assigned a high priority by the college. Finally, and more briefly, attention will be given to the "grand design" to assess the effects of the expanded opportunity offered by the college on its new and traditional students, on the nature of the college itself, and on the community at large.

Potential Student Clienteles. A census of the current high school seniors appears to offer the best point of departure for new studies by community colleges of potential student clienteles. A recent grant from the Ford Foundation to the American Association of Junior Colleges has made the design of a model for such studies possible, including the development of an interview schedule. The basic data are selected characteristics and college-attendance plans (or desires) of high school seniors. The data are used to construct matrices of college-going behavior for men and women, black and white, categorized by academic ability and socioeconomic status. Grades, rank in class, and standardized test scores available from school records can be used to develop a suitable index of academic ability for grouping students into four categories of ability. A simple, fairly reliable index of socioeconomic status is the average family income for the census tract where the student resides, again for the purpose of placing students in four categories based on the index. (Family income and other sociological data for each census tract are available to the colleges for research purposes, thus reducing the amount of data collection and decision-making normally required to develop such an index.)

The analysis of differences among high schools is also an important aspect of the model. School differences in college attendance may then be related to accessibility to the community college, degree of social integration of the school, the nature of its curriculum, and its proximity to census tracts with certain average family incomes. The alternative educational plans of seniors in different types of high schools are also of interest, i.e., numbers choosing the local community college, other types of colleges, business schools, technical institutes, hospital schools of nursing, and post-

graduate programs in the high schools. A comparison of plans to attend college (as indicated by the submission of transcripts) and actual college attendance may uncover "non-students" who are good candidates for enrollment in community colleges. The 4 x 4 matrices (academic ability and socioeconomic status, for college- and non-college-goers) also reveal whatever concentrations of ability and financial need exist for recruitment to the community colleges. Above all, such analyses reveal inequalities in opportunity for higher education, barriers to college attendance, and, far too often, lack of information about opportunity.

Samples of non-college-goers were interviewed in the Ford Foundation study, in an attempt to obtain information useful to the colleges in attracting new types of students and planning for them. The major lines of questioning in the interviews with non-students were their feelings about their high school experiences, their plans for immediate and eventual employment, the characteristics of jobs and employment situations important to them, the attitudes of the men toward military service, and their interest in continuing their education beyond high school under various circumstances and in different types of programs. The interviews often led to an exchange of information about the local college and, in some instances, to actual college enrollment. The expressed need for additional education or training by those who would not become full-time students should be of interest to the colleges in their planning of continuing education programs.

A logical extension of the studies of college-going behavior of high school graduates is a study of high school dropouts with unmet needs for further education at various levels. A census of high school seniors who did not graduate was made as part of the Foundation-funded study, to find out how many young people "almost made it," to the point of qualifying for college and jobs as high school graduates, but who did not make it for reasons of motivation, academic failure, disciplinary suspension, or the like. The census produced fewer senior-level dropouts than expected, but a by-product of the analysis was the discovery of a significant number of adult graduates who are potential students in community colleges. The census of school dropouts needs to be extended in three directions if it is to be complete for college-age youth. First, information is needed on the needs and other relevant characteristics of dropouts who left school before the senior year, particularly in localities where the community college may admit dropouts who are at least eighteen years of age. Second, a census is needed of dropouts from high schools outside the college service area (often from out-of-state schools) who come to the locality served by the college, sometimes with their families, but more often alone. Their prior educational experience and their needs and interests may differ in both quality and content from those who drop out of local schools. Finally, college dropouts from four-year institutions constitute a sizeable potential student group for community colleges, particularly those recently established in localities where there may be a considerable reservoir of undereducated college dropouts.

The census of college-age youth who are potential clienteles of the community college will in most cases start with the public school records and counselors to obtain an accounting of high school graduates, seniors, and recent dropouts. Local youth agencies, neighborhood centers, state employment agencies, and church groups are all sources of information about those school and college dropouts who are beyond the reaches of the local public schools. A model for a more comprehensive census of the educational status of non-college-goers is being developed by an urban community college in the Washington area. A city-wide roster of high school seniors without post-graduation plans for college, employment, or military service was prepared under community agency auspices, with the high schools providing both names and transcripts. The community college used the city-wide lists to prepare neighborhood rosters of non-college-goers to be contacted by students, to inform them about opportunity for further education at the college (including financial aid, occupational programs, and special services). An attempt was made to reach the seniors in their homes, with other members of the family present who might also be able to benefit from programs and services offered by the college. The action study was concentrated in poor neighborhoods where college attendance rates are lowest. Adult students in "New Careers" programs were used as interviewer-recruiters, in the expectation that they would have good rapport with the poor families who were in many cases their neighbors. Thus, while the focus was on informing and recruiting high school seniors, the approach used made it possible to survey entire families, who might include dropouts of various ages and at various levels of completion, the undereducated and underemployed adults, and young students who might then become interested in college in time to improve their public school performance.

Two other approaches were taken by urban community colleges that received funding from the Office of Economic Opportunity for research and development projects. The major intent in each situation was the identification of the educational needs of undereducated, poor adults and the design of programs to help meet these needs. In one instance, the focus was on the needs of families of children in Head Start programs in the locality of the college facility. In the other, the families of disadvantaged students in a special college program were the object of the study of unmet adult needs for further education. A survey of family units provides a wider range of data than does a census of a particular age group, e.g., high school seniors. The community college cannot be expected to develop programs to meet all needs that emerge from such surveys, or to provide opportunity for all who need further education or training. However, identification of potential student clienteles with varied interests, needs, and qualifications is the necessary first step a college must take in setting priorities for programs funded both locally and federally. Other educational-training agencies in the community may then join forces with the college to assure that the educational needs of all will be met, now and in the future.

The "Grand Design." Two-year colleges are just now beginning to study their impact on their full-time students. Very little is known, however, about the impact various student clienteles may have on the college, or about the eventual impact two-year college-educated students will have on their community. Certain basic questions concerning the interactions of student, college, and community are researchable.

1. How and to what degree are students who attend a community college different from graduates of the same high schools who do not attend college at all,

a) at time of graduation from high school,
b) one year after high school graduation,
c) at the time a significant percentage of the students complete college programs,
d) five and ten years later?

2. What impact does the introduction of new programs and services have on the characteristics of the student body, in terms of
   a) the success of students already enrolled (or new students like them),
   b) the attraction of new types of students to these and other programs,
   c) the demand by the community for still other programs and services?
3. What changes take place in the manpower needs of the community as a concomitant of the development of new occupational curricula by the college, as shown by
   a) areas of critical manpower shortage,
   b) employment in New Careers fields,
   c) enrollment in high school vocational programs,
   d) enrollment in proprietary schools, union apprenticeship programs, on-the-job training, and other programs not under college auspices?
4. What effect does the enrollment of a significant group of disadvantaged students have on the community, in terms of
   a) performance in school of younger members of the family,
   b) interest in and increased appreciation of education by adult members of the family,
   c) enrollment in education-related activities by adults in the family, including job training, consumer education, political education, and child development programs,
   d) group interest in and demand for better education in the students' neighborhood?

Summary

The community college must study its potential student clienteles—their changing needs, interests, values, and activities—if it is to construct a future that is a realistic response to the community that supports it. Size is important, in terms of quantitative needs for facilities and staff. However, failure to take into account the characteristics of community groups now without opportunity for education after high school will result in either a diminution of the college's influence in the community or a drift toward mediocrity, or both. Some predict that the community college will become a predominantly community service institution in the near future, as a result of a growing demand for new patterns of continuing education for the under-educated of all ages. Other agencies and institutions are expanding their programs to serve young people at this time of huge growth in the two-year colleges. Area vocational schools and technical institutes are bidding to perform the occupational education functions. Four-year colleges and universities, while continuing their trend toward selectivity, are actively seeking the untraditional student with undeveloped talents who has been previously overlooked in the search for excellence.

It is no longer enough to be accessible, open-door, free, and comprehensive. The community colleges must go out into their service areas to survey their potential clienteles, while continuing to assess their impact on their enrolled students.

BIBLIOGRAPHY

1. American College Testing Program. *College Student Profiles: Norms for the ACT Assessment*. Iowa City, Iowa: American College Testing Program, 1966. (See also *ACT and the Two-Year College* and other periodic research reports.)
2. American Council on Education Research Report. *National Norms for Entering College Freshmen—Fall 1968* Vol. 3, No. 1, 1968, John A. Creager *et al.* Washington, D. C.: American Council on Education, 1968. (See also *The Black Student in American Colleges* and other research reports.)
3. Cross, K. Patricia. *The Junior College Student: A Research Description*. Princeton, New Jersey: Educational Testing Service, 1968. (See other Educational Testing Service research reports.)
4. Knoell, Dorothy M. *Toward Educational Opportunity for All*. Albany, New York: The State University of New York, 1966.
5. ————. "Who Goes to College in the Cities?" *Junior College Journal*. Vol. 40, No. 1, September 1969.
6. Project SCOPE reports (School to College: Opportunities for Postsecondary Education, Dale Tillery, Project Director). Berkeley, California: Center for Research and Development in Higher Education, 1969.
7. Project TALENT reports to the U. S. Office of Education, Cooperative Research Projects No. 635, 226, and 3051. Project TALENT Office, American Institutes for Research, Pittsburgh, Pennsylvania.
8. Trent, James W., and Medsker, Leland L. *Beyond High School*. San Francisco: Jossey-Bass, Inc., 1968.
9. U. S. Bureau of the Census. *Education of the American Population*. (A 1960 Census Monograph, John K. Folger and Charles B. Nam.) Washington: U. S. Government Printing Office, 1967.

NEEDED:

Rx for Community College Student Assessment

Growing numbers of students are enrolling in growing numbers of community colleges. Evaluation of achievement potential and assessment after enrollment of these students pose real problems closely associated with the philosophy of the institution. The purpose of this paper is to clarify some of the problems and to discuss possible approaches, but, most importantly, to call for concerted effort in the area of student assessment in the community college setting.

Most would agree that we need to know something of the achievement potential or educational development of community college students upon enrollment. One of the problems therefore is that the typical student who enrolls in a community college does so as the result of a late decision. Just how late can be seen in Table I, which reports the applications near the end of August as a percent of final enrollments for the Fall quarters, 1967 and 1968, at Area Ten Community College in Cedar Rapids, Iowa.

Table I

Applications at End of Third Week of August as Per Cent of Final Enrollments at End of Fall Registrations

	Per cent	
Division	1967	1968
Vocational-Technical	63	89
Arts and Sciences	55	50

Clearly a sizable portion, about half in the Arts and Sciences Division, apply shortly before classes begin. What are the problems? First, data from a national testing program are frequently not available; these students simply did not anticipate the need for the test while enrolled in high school. At Area Ten Community College, the American College Test (ACT) is "required" in the Arts and Sciences Division of full-time enrollees and of part-time enrollees after they accumulate twelve credit hours. In the Vocational-Technical Division, the General Aptitude Test Battery (GATB) is used to assess potential upon enrollment. Table II reports the enrollment for Fall 1967, Fall 1968, and the numbers tested in 1968.

Table II

Headcount Enrollment: Number Tested

Division	Fall 1967 Full-time	Fall 1967 Part-time	Fall 1967 T	Fall 1968 Full-time	Fall 1968 Part-time	Fall 1968 T	Number Tested 1968
Vocational-Technical	389	27	416	653	36	689	419*
Arts and Sciences	274	237	511	589	370	959	391**
Total	663	264	927	1242	406	1648	810

*American College Test

**General Aptitude Test Battery

The much larger percentage of full-time enrollees in Vocational-Technical, coupled with notably earlier registrations in this division (Table I), can be explained in several ways. The undecided student (that is, the late registrant) is postulated to drift more readily into Arts and Sciences, whereas the Vocational-Technical enrollees have more clearly defined goals. In each division, however, the problem remains. We should like to describe an entering class and, further, to assess year-to-year changes and program-to-program differences in potential. Instead we are limited to studying a *sample*, probably positively biased. It is imperative that the size of such samples be increased.

Some schools report a get-tough policy followed by rapid improvement. This should be a cautious step, as is obvious from the incongruity of testing requirements for admission and an open-door policy. Clearly, we can ask a student to provide information about himself. We need it to plan instruction; we need it to help him help himself. It is quite another matter to withhold participation in any phase of the community college experience pending such information.

Some schools, including Area Ten Community College, politely ask the students to come in for residual testing. Often this request is made only after a faculty member or research specialist has called for the data. When faced with the prospect of giving his time and usually his money, these students frequently remain untested. It appears that some block of time in the opening week of a quarter needs to be found for collecting the information that it is inappropriate

by Barbara Thomas

Area Ten Community College (Iowa)

to collect at registration time. There is probably a real need to divorce the testing needs from any economic considerations. At Area Ten Community College, in Fall 1968, ACT data for 74 per cent of those who enrolled and who had been tested indicated that they expected to work. In many cases, the work load of these students exceeds twenty hours per week. Another indication of financial need is how often this is given as a reason for withdrawal. Table III reports reasons for withdrawal. Again, we are talking about a *sample.* Of a total of 328 students who enrolled in Fall 1968 but did not reenroll in Winter 1969, only 119 completed a withdrawal form.

Table III

Stated* Reasons for Withdrawal
Fall 1968

Reason	Number	Per cent
1. Lack of interest	24	20
2. Illness	22	18
3. Conflict with work	19	16
4. Financial	14	11
5. Not stated	9	7
6. Transfer to another school	6	5
7. Moved from area	5	5
8. Drafted	4	3
9. Enlistment	4	3
10. Marriage	2	1
11. Arrest	2	1
12. Inability	2	1
13. Personal	2	1
14. Illness in family	2	1
15. Dissatisfaction	1	.8
16. Pregnancy	1	.8

*Stated versus real reasons are another problem.

Consideration of withdrawal data points up other difficulties of student evaluation. Longitudinal studies are needed. Relationships between performance and other factors—predictors of success, employment load, involvement in activities, clarity of goals—need to be explored. Studies of this nature are difficult to complete when they involve students enrolled in programs suffering an attrition rate as high as 47 per cent for full-time students and even higher for part-time students. A busy staff can do little more than blink at the turnover. Of course, the problem of student attrition has greater priority in areas other than evaluation; perhaps maturation of the community college effort will lessen this problem.

Placement is another important area where evaluative efforts run into difficulties unique to the community college. The recurrent generalization in Area Ten Community College's 1968 in-house testing supported the data provided by ACT and GATB results. These students are most noteworthy in their diversity. Consequently, an instrument that can distinguish (that is, place efficiently) at one end of the spectrum may, and often does, fail miserably at the opposite end. Another area on which test-construction people should concentrate is in normative data for comprehensive community colleges, for vocational-technical students, and for adult education programs. The comprehensive community college is not a junior college. Yet junior college normative data are frequently the best guides available.

A final deterrent to student evaluation in the comprehensive community college is the over-worked condition of the faculty. It has already been noted that the student body is a diverse group. Providing challenging and appropriate instruction for this type of student body, while teaching 15 to 16 credit hours in the Arts and Sciences Division and more in the Vocational-Technical Division, leaves little time to contemplate student growth. Two solutions come to mind. The teaching load could be reduced, possibly by providing assistance. The economics of the situation may favor this. Equipment and personnel to provide services such as machine scoring and item analysis may well be feasible and would also boost faculty morale.

Too few solutions, or even possible solutions, have been offered. It is hoped that the problems discussed will evoke discussion, proposals, and reports of successes and failures.

COMPARISON OF VALUES: Two-Year vs. Four-Year Students

by Carl E. Glenister
State University of New York

With the creation of many new two-year colleges and the increasing enrollments in established two-year colleges, administrative officials, student personnel workers, and faculty are becoming increasingly aware of the importance of knowing about and understanding the types of students who enroll. Basic information is needed concerning their academic backgrounds, interests, aspirations, and values if the total college community is to join forces to provide a milieu to make the college experience more meaningful.

For one of the current research projects on this campus (State University of New York), information on the values of students is being collected. This paper will describe the data that were collected and interpreted for the two-year technical college students enrolled in this college and compare them to the data reported for four-year college students. The *Study of Values Scale*, by Allport, Vernon, and Lindzey [1] was used to collect the data.

The *Study of Values Scale* was designed primarily for use with college students or with adults who have had some college experience. The classification of the scales is based on Spranger's *Types of Men* [2] which defends the view that personalities of men are best known through a study of their values or evaluative attitudes. The six basic interests or motives in personality measured by the scale are: theoretical, economic, aesthetic, social, political, and religious values.

Description of College Community

The student sample was drawn from one of the six agricultural and technical colleges sponsored by the State University of New York. All but two of the 28 degree programs are designed as terminal programs, although 30 per cent of the graduates transfer to four-year degree programs throughout the United States. The major divisions of this college include: Agriculture, Business, Engineering Technology, and Nursing.

Fifty-five per cent of the 1,400 students enrolled at this college come from Northern New York State, a traditionally conservative agricultural area. In recent years, however, some small industries have moved in. The remaining 45 per cent of the students come from other parts of the state.

Twenty-five per cent of this student body is considered economically deprived and therefore qualified for scholarships and other financial aids. About 60 per cent of the student body is using loans to pay for some part of the college experience.

Method

The *Study of Values Scale* was administered to a sample of freshmen students during the first month of the academic year. Two groups were selected, one male and one female, all living in residence halls. The groups were selected and matched by sex and by the score each student received on the college entrance exam.

After the scale was scored, the means and standard deviations were calculated separately for the males and females. Next a t-test was computed to see if significant differences might be found in the six value areas when the data on the two-year student were compared with the data registered for the four-year students in the *Study of Values Manual*. The results are presented in Tables I and II.

Discussion

Theoretical: In the theoretical area of the scale, the mean score of the two-year technical college male students was lower than that of the four-year college male students. The difference is significant at the 1 per cent level. Spranger indicates that "A person in pursuit of theoretical goals characteristically takes a cognitive attitude, one that looks for identities and differences; one that divests itself of judgment regarding the beauty or utility of objects, and seeks only to observe and reason" [2].

In reference to Spranger's interpretation of the theoretical scale, this suggests that the two-year college male is less interested in the practical aspects of learnings. The four-year college males seem to come closer to Spranger's explanation of theoretical goals.

The two groups of female students have similar means on this scale, indicating that college females, in general, are not as theoretically oriented as college males.

Economic: Both the male and female two-year college students had higher mean scores on the economic scale than the four-year college students. The difference in the mean score of the males is significant at the 1 per cent level and the difference in the females' mean score is significant at the 5 per cent level.

Spranger mentions that "the economic man is interested in what is useful and practical." An economic person is described as "one that is thoroughly practical and conforms well to the prevailing stereotype of the average American business man" [2].

The students enrolling at this college seem to be somewhat more concerned about business and financial matters than the four-year college student. They perhaps are attracted by the numerous business curricula offered, as 35 per cent of the student body is enrolled in such a program. These students learn about various business functions and prepare for jobs in the business world.

Aesthetic: The two-year college females' mean score on the aesthetic scale is significantly lower than the mean score of the four-year college female. This mean score is statistically different at the 1 per cent level. The two-year college males' score is lower than the four-year college males' score although not significantly.

Spranger indicates that an aesthetic man places more importance on grace, symmetry, or fitness of experience. This person finds his chief interest in the artistic aspects of life, as opposed to theoretical points of view [2].

It appears that the lower mean score of the two-year college students on this scale is compatible with the score on the economic scale. The two-year college student seems to be more interested in the practical and useful than in the abstract and creative. It seems that this information could be valuable for those who are planning the activities programs on this campus.

Social: The two-year college male and female groups both had a higher mean score on the social scale than did the four-year college males and females. The means of the two-year college students were significantly higher at the 1 per cent level of confidence.

Table I

Comparison of 2-year with 4-year College Males

	2-Year College Males N-71		4-Year College Males N-2489	
	Mean	S.D.	Mean	S.D.
Theoretical	41.0*	5.75	43.75	7.34
Economic	45.49*	6.95	42.78	7.92
Aesthetic	33.79	7.43	35.09	8.49
Social	39.73*	7.03	37.09	7.03
Political	43.01	5.82	42.94	6.64
Religious	37.92	7.86	38.20	9.32

Table II

Comparison of 2-year with 4-year College Females

	2-Year College Females N-70		4-Year College Females N-1289	
	Mean	S.D.	Mean	S.D.
Theoretical	35.49	6.04	35.75	7.19
Economic	39.67**	7.15	37.87	7.30
Aesthetic	36.62*	7.80	42.67	8.34
Social	44.94*	6.17	42.03	7.02
Political	41.37*	6.57	37.84	6.23
Religious	41.30*	7.81	43.81	9.40

*Significant at or beyond the .01 level.

**Significant at or beyond the .05 level.

Spranger characterizes the social person as one who has great love for people. He feels that the social scale specifically indicates the altruistic or philanthropic aspects of love, which are important in human relationships. He also feels it is an indication of a religious attitude [2].

The conservative, small-town backgrounds of many of the students at this college may have influenced the higher mean score on this value. The small-town atmosphere, which often enhances closer interpersonal relationships, could affect the way these students feel about personal interaction and probably influenced their reactions to the items on the *Study of Values Scale*.

Political Scale: The two-year college females' mean score on the political scale is significantly higher than the mean score of the four-year college females. It is statistically different at the 1 per cent level. There was no significant difference in the mean scores of the two groups of males.

According to Spranger, a political person is primarily interested in power. Leaders in any field generally have a high power value, and competition and struggle play a large part in their life [2].

It seems, as measured by this scale, that the type of female student who selects and attends this two-year college may be more power-motivated than her four-year counterpart. The greater importance placed on the political aspects of life may be influenced by the fact that most of the females of this college anticipate taking jobs after graduation. Since the types of job they will be taking are often quite competitive in nature, they must prove their worth through mastery of skills to achieve upward mobility.

The males enrolling both at this college and at four-year colleges have similar power and political values. This may indicate that both groups of males anticipate taking jobs that will provide competition and struggle. As traditionally men have accepted this role of the bread-winner in a family, it may have influenced the similarity.

Religious: The two groups of college females have a significantly different mean score on this scale at the 1 per cent level of confidence. The four-year college females have the higher score, but there was no significant difference in the mean score of the two male groups.

Spranger states, "The highest value of the religious man may be called unity." He defines the religious man as "one whose mental structure is permanently directed to the creation of the highest and absolutely satisfying value experience" [2].

The lower mean score of the two-year college females seems to support the data discussed earlier in this paper. The female students who participated in this project do not seem to be highly interested in the philosophical or the more creative facets of life, but are interested in its practical aspects.

Summary

The males at this college seem to be more interested in the practical aspects of learning and less in the abstract or theoretical. They are primarily interested in things that will enable them to be proficient in a particular job situation. These males also seem to realize the importance of good human relationships and to have a fairly altruistic or philanthropic outlook on love.

The females at this college also seem to be more interested in the practical aspects of learning than in the theoretical. They seem to be more interested in what is useful and are not overly concerned with aesthetic aspects of everyday situations. They have an interest in power, although they also realize the importance and value of human relationships.

This study presents a partial value description of the type of student that seems to be attracted to this college. It will be interesting to see if significant value changes occur after they have been on campus one year. If a significant change is found, we will then be able to assume that the institutional goals and atmosphere have had some influence.

As mentioned earlier, it seems important that the total college staff, administration, faculty, and student personnel workers be aware of the type or types of student and the values they hold important. Better programs can be planned and more effective techniques can be used when we have knowledge of the interests, aspirations, and values of the students with whom we are interacting.

BIBLIOGRAPHY

1. Allport-Vernon-Lindzey, *Study of Values Manual: A Scale for Measuring the Dominant Interests in Personality*. Boston: Houghton Mifflin Company, 1960.
2. Spranger, Eduard, *Types of Men*, Translated from the fifth German edition of *Lebensformen* by Paul J. W. Pigors. Halle: Max Niemeyer Verlag, 1928. (American Agent: Stechert-Hafner, Inc., 31 East 10th Street, New York.)

THE JUNIOR COLLEGE TRANSFER STUDENT

by Terry O'Banion

University of Illinois

In a recent review of major research effort on the junior college student, Cross [3] concludes:

> We possess only traditional measures to describe a student who does not fit the tradition. The inevitable result is that we picture America's newest college student as being less adequate than his peers at the tasks of higher education—tasks which have been developed over the years for a different type of student. We must conclude that intellectual dimensions sharply differentiate junior college students, as a group, from senior college students. The junior college student is less able —on our present tests; he is less intellectually oriented— on our present measures; and he is less motivated to seek higher education—in our traditional colleges.

Fortunately, however, current research instruments are being re-evaluated in light of new social and economic developments. Research designs are in a state of transition from strictly quantitative measurements of academic aptitude and achievement to more qualitative measurements. Every major testing company in the nation is experimenting with new instruments to measure the needs and characteristics of the non-traditional student who attends the junior college.

At the present time, however, only the usual kinds of instruments are available to measure the usual kinds of student and, when the junior college student is compared with the four-year college and university student, this must be kept carefully in mind. When the nature of the junior college student is described, therefore, the description is within a frame of reference where he most often appears in a less favorable light than his counterpart on the campus of the four-year college or university.

The objective of this review is twofold. First, it will describe in a general way what is known about the junior college student. Second, it will examine some of the characteristics of the transfer group in particular. Much of the following information is summarized from Cross's *The Junior College Student: A Research Description* [3].

The Junior College Student

A great many research data have been accumulated comparing the academic ability and achievement of the four-year college student with those of the junior college student. Student academic ability is, of course, one of the most thoroughly researched areas in higher education. Almost all national, regional, and statewide studies that include large and diverse samples of junior college students have discovered that they have lower mean scores in academic ability and achievement than four-year college and university students.

In a major study conducted by Project Talent involving some 400,000 students, the junior college group fell below the four-year college group on every one of fourteen measures of academic ability, ranging from reading comprehension, mathematics ability, biology, vocabulary, and creativity, to abstract reasoning. From these data, Cooley and Becker conclude that junior college students are more like their non-college counterparts in academic ability than they are like four-year college students [2].

On the variables relating to socio-economic background, research findings indicate that the parents of junior college students have a lower socio-economic status than parents of students in four-year colleges and universities. While such studies demonstrate that the junior college is playing a highly significant role in the democratization of higher education, they also reveal the growing class distinctions that exist between the junior college and the four-year college group.

A number of research studies have surveyed the attitudes of parents toward college. These attitudes have been shown to have a profound effect on student decisions to attend two-year or four-year institutions. The SCOPE (School to College: Opportunities for Postsecondary Education) study indicates that only half the students entering junior colleges received strong encouragement from their fathers to attend college, while almost two-thirds of those entering four-year colleges received such encouragement. This statement is particularly significant in light of the evidence that only one-fourth of the students who fail to enter college at all receive such encouragement [3].

Few students report that they postpone going to college on the basis of cost alone. The SCOPE questionnaire reveals, however, that finances are a prime consideration in student selection of a college. This was true of almost half (46 per

cent) of the junior college students studied. In contrast, only one-third (35 per cent) of the senior college students indicated that cost was a major consideration in their selection of a college [3]. ACE (American Council on Education) data gathered by Astin show similar findings [1]. Location of the college is also important, because the junior college student generally lives at home, where he can receive free room and board for two years. Research indicates that this fact has a significant impact on the student from a lower socio-economic background.

There are also marked differences between junior college groups and four-year college groups in personality characteristics. In the ACE Survey by Astin, which included 250,000 freshmen, junior college freshmen were seen, as a group, to be less self-confident than four-year college and university freshmen in traits such as academic ability, drive to achieve, leadership ability, mathematical ability, intellectual ability, and writing ability [1]. Junior college students are less likely to value humanitarian pursuits, are more dependent, more authoritarian, more likely to be cautious and controlled, and less likely to be venturesome and flexible in their thinking. Junior college students are less interested in intellectual activities, which, of course, are the major concern of four-year colleges and universities. Junior college students are more oriented toward vocational choice and other practical considerations. Getting a good job and earning a living are of great importance to them. The only area where they expressed confidence equal to or greater than the four-year college group was in non-academic abilities. These include manual skills, athletic abilities, cooking, sewing, and the like [3]. These pursuits, if football is excluded, are not held in high esteem by universities.

These, then, are some of the general characteristics of the junior college student as compared with the four-year college and university student. The research indicates that in almost all instances he comes off second best. It has not been the intent of this review to contribute to the development of a negative perception of the junior college student. On the contrary, its purpose has been to describe some of the obstacles facing him so that positive programs can be organized for his development.

In this brief overview of characteristics of junior college students in general, what factors help define the characteristics of transfer students in particular? How do these characteristics contribute to the problems with which transfer students must cope?

Problems of the Transfer Student

The term "transfer shock" has become part of the educational language to describe what happens to the junior college student who transfers to the four-year college or university. The condition usually refers to the student's academic progress, but it is also a meaningful description of his other reactions to his environment.

One of the most thorough studies illustrating the impact of transfer shock on academic achievement is by Hills [5]. He summarizes 20 studies related to transfer students and reaches the following conclusions:

1. Junior college students in their first term of transfer experience the loss of half a letter grade. There is a usual but variable partial recovery of perhaps half this drop over the remainder of the transfer students' upper-division work.
2. The transfer students do not do as well as the native students by about .3 GPA.
3. Fewer transfer students than native students graduate.
4. Transfer students take longer to graduate than do comparable native students.

It can be hypothesized that the transfer shock that results in a reduction of grades and in a longer time to complete a program of study is probably related to some psychological disorientation caused by a number of factors.

The junior college student has been a dependent student. He has lived at home with parents and close friends for 19 or 20 years. His adolescence is prolonged, while his four-year college and university counterparts are being forced to experience independence through new ways of living and learning. Often relieved to be free of the home environment and to be in the university where he can struggle with new ideas and new ways of relating to others, the transfer student must learn how best to do this in the context of his new-found freedom. At the same time, he must learn how to deal with the insecurities of living alone without the comfort of family direction and security. This is the dilemma confronting the junior college transfer student.

The junior college transfer student, like the general college student, complains about the impersonality of the university. For the most part, however, his complaints occur at a time when his fellow juniors have already become adjusted to the system. Such adjustment may be particularly difficult for the transfer student because the junior college attempts to be a more helpful and more nurturing kind of institution than the university. Junior colleges are especially committed to a program of student personnel services that provides individual attention. Every student has an academic advisor, often a professional counselor, available whenever the student needs help.

In a study by Knoell and Medsker [6], junior college students rated their academic advising and counseling on the junior college campus as being more helpful than that available on the university campus. Counseling or advising offered in the senior college is usually too infrequent and the sessions too short. Faculty advisors in the four-year colleges and universities are generally unfamiliar with the junior colleges, often uninterested in the advisee, and seldom available for consultation with the student. When the student has become used to help, he is quite discouraged to feel that no one cares or has the time in a larger institution to help with his problems.

One junior college in Florida, located in the same city as a large university, continues its counseling and advising services to the transfer student after he enrolls in the university. The student frequently returns to the junior college to get the kind of advice he requires. This particular junior college has established an informal policy of requesting that the transfer student seek help in at least three offices on the university campus before returning for consultation.

The junior college transfer probably comes to the four-year college or university with less confidence in his academic abilities than the native four-year college student [1]. The junior college is quite often the second choice of this student; he comes to accept himself as a second-class citizen because he was not granted admission to a four-year college or university directly from high school. This attitude is often complicated and reinforced when he meets similar percep-

tions at the university. Admission personnel, professors, and other students at the university often perceive the junior college as a second-class institution and communicate, sometimes not very subtly, these perceptions to the transfer student. The comment of a president of a famous four-year liberal arts college in the East is a good example. On a nationwide television broadcast, she described the junior college as "the wastebasket of higher education" [7].

The junior college transfer student is further disoriented by the large array of social programs available at the university as compared with the junior college. Since the junior college student generally commutes, and meets personal, social, and recreational needs within the community to which he is accustomed, social programs on junior college compuses are generally not extensive. The transfer student is confused by all the choices at the four-year college or university. Although he recognizes that he must work hard and study, he is also influenced by the desire to belong and become part of the social environment. Unfortunately, the recruitment of most special-interest groups at the university level is directed toward freshmen. Sororities, fraternities, and other social organizations gear their "rush" programs toward the entering freshmen. As a consequence, the transfer student can easily become a "loner" on the campus. He enters the Junior Class at a time when social groups have become fairly well stabilized.

The junior college transfer student also faces difficult financial problems. Some are forced to drop out of school after the completion of their sophomore year to earn money to transfer. Others enroll in the four-year institution with only enough money to see them through the first semester, in hopes of receiving financial assistance. Financial aid is generally available for college students, but the transfer student is caught in a bind.

Here is a typical example: A student, admitted too late to apply for financial aid the first term, works to support himself. Because of the pressure involved in adjusting to his new environment, his grades usually drop as much as a half grade point during the first term. Often this disqualifies him for financial aid the second semester, and also makes it difficult for him even to secure part-time employment. Under such circumstances, he becomes discouraged. Knoell and Medsker discovered that approximately 40 per cent of the transfer students who voluntarily withdrew from the university listed "lack of money" as one reason for dropping out [6]. Gleazer [4] sums up these problems when he writes:

> Very often these people enter the junior college in the first place because the publicly-supported institutions are close to home and the tuition is either low or non-existent. Also, a large per cent of the students work while they attend the junior college. When they go away to a four-year college they find that the costs are more than they have estimated and that state and institutional financial aid programs are not organized with the best interests and needs of the junior college student in mind. Very few four-year colleges have earmarked scholarships or made special financial provisions for transfer students.

Other important contributions to the transfer difficulty are admissions policies and evaluation procedures. The junior college student may be admitted on probation because his college is only two years old and not yet eligible for accreditation. He may have to secure recommendations from his high school principal and supply a high school transcript. Although he took a battery of tests on entering the junior college, he is told that he must undergo additional testing at the four-year college or university. There is little or no evidence that the results are used either in making decisions about the admission of most of the applicants or in advising enrollees about their majors and programs [6]. All this bureaucratic red tape only makes him question the relevancy of his two years of "education" at the junior college.

If he is admitted, his credentials are still subject to careful scrutiny. He discovers that his general education biology course will not transfer because he had no laboratory work. His three-hour course in personal development, which he considered the most important experience at the junior college, will not transfer because the university does not grant credit for human growth. The lack of prerequisites means that he will have to take additional course work before he can begin on his major. Further credit is whittled away because his courses are numbered in 100's or because they appear to be technical rather than liberal arts.

Considering these and other circumstances, "transfer shock" begins to have meaning. A work-weary student, aware of his lower socio-economic background, with documented evidence of his lower ability, dependent on home and community, and under financial stress, is suddenly in competition with his more sophisticated counterparts. Perhaps "shock" is too mild a word.

BIBLIOGRAPHY

1. Astin, A. W.; Panos, R. J.; and Creager, J. A. "National Norms for Entering College Freshmen—Fall, 1966." *ACE Research Reports*. Washington: American Council on Education, 1967.
2. Cooley, W. W., and Becker, S. J. "The Junior College Student." *Personnel and Guidance Journal*, January 1966, pp. 464-469.
3. Cross, K. Patricia. *The Junior College Student: A Research Description*. Princeton, N. J.: Educational Testing Service, 1968.
4. Gleazer, Edmund J., Jr. "Junior Colleges—Problems of Transition." *Journal of the Association of College Admissions Counselors* Vol. II, No. 2, 1966, pp. 20-21.
5. Hills, J. R. "Transfer Shock: The Academic Performance of the Junior College Transfer." *Journal of Experimental Education*, Spring 1965, pp. 201-205.
6. Knoell, D. M., and Medsker, Leland. *From Junior to Senior College: A National Study of the Transfer Student*. Washington, D.C.: American Council on Education, 1965.
7. Raushenbush, Esther. Quoted in Fordyce, J. W. "Institutional Expectations and Influences." Paper presented to American Council on Education, 48th Annual Meeting, Washington, D.C., 1965.

THE CIRCLE OF EVALUATION IN THE COMMUNITY COLLEGE

by James W. Trent

University of California, Los Angeles

In society a tension inevitably exists between established norms and changing situations. The way to resolve inordinate tension is to reform the institutions that society depends on for its maintenance. In this sense, reform has never been more needed than now.

The main vehicle for social reform is the college. This is true since higher education is the custodian of our culture and the catalyst for its development. Social reform, therefore, cannot follow without commensurate educational reform. Appropriate research and evaluation are prerequisites to forming sound programs for reform.

Obviously, research has value beyond the quest for knowledge. In addition to this important intellectual exercise, research is essential to the continual understanding of society and its subsequent progress. It is important specifically to education, which is a root of society. Obviously, too, research loses much of its value when it is not related to social action. The days of the exclusive ivory tower are gone. Instead these are critical days for educational evaluators, certainly in the case of the two-year community college.

Increasingly, the community college is assuming most of lower-division higher education. Many educators and government officials regard it as the primary institution to implement universal higher education, for it has been established by federal decree that all who are capable are to have access to college. This means that the community college, more than it ever has before, must deal intensely with the lives, careers, and leadership of our coming generations. It means also that the community college must examine itself to assure that it is not only carrying out its mission, but also doing it in the most effective way. Yet the extensive reviews and critiques of the literature by Cross [7] and Cohen [5, 6] indicate a dearth of systematic research and evaluation pertinent to the community college.

Because of the focal role of the community college in higher education, it can no longer afford to go unevaluated as it has. It is too important to hide behind debilitating defensiveness and clubbishness. The value of its functions and objectives must be demonstrated and, if they are found wanting, a way must be sought for their implementation. We can no longer speak of an open-door college when it is evident that too often it is a revolving-door college. We cannot speak of it as a community college when there is non-communication with important segments of the community. Nor is it appropriate to speak of it as a student-centered college in the face of continual evidence of heavy attrition among its students, certainly not a saluatory experience for them.

What is necessary now is an assessment of the nature and impact of the whole system of community colleges, free from prejudgments and preconceptions. Such evaluation involves much more than most of the little research now done in community colleges, such as counting withdrawals and transfer students, predicting grade point averages from academic aptitude scores (suitable for white middle class students, but probably not for most minority students), preparing for accreditation, or recounting selected successes among graduates, as important as these matters are.

Programs for educational improvement will and, in many cases, should vary by institution. They should, however, be evaluated so that both their shortcomings – almost never mentioned – and effective features can be determined objectively. Too often what is professed to be program evaluation is only a summary of the impressions of those involved in the program. Impression is sometimes helpful to evaluation but seldom sufficient. Systematic research and evaluation of these programs are essential to learn those principles and techniques that are effective, replicable, and applicable to other institutions at a minimum of expense. To deal with reform properly, the research must also consider the implications of the evaluated programs for change on a single campus and for the entire system of higher education. Moreover, the research should consider the implications not just for the next few years, but for many years to follow.

Fundamental to such a systematic evaluation of the community college and its programs is an understanding of the dynamics of the different institutions in the community college system and of the different students who attend these institutions. At present, there is no systematic or system-wide information on the impact of the community college or any of its programs on its students or on the broader community it serves. Since 1960, however, there has begun to develop a body of research on the characteristics of community colleges, of their students, and of the outcomes of their programs. The research is comprehensive and relatively sophisticated, especially when compared with research on the community college before 1960. Contributors include: Astin, Panos, and Creager [1]; Baird and Holland [2]; Berg and Axtell [3]; Clark [4]; Hills [8]; Hoyt and Munday [9]; Knoell [10]; Knoell and Medsker [11]; MacMillan [12, 13]; Medsker and Trent [14]; Panos [15]; Richards and Braskamp [16]; Richard, Rand, and Rand [17, 18]; Tillery [19]; and Trent and Medsker [20]. Many aspects of

this research have been summarized and synthesized by Cross (1968).

The research indicates measurable environmental characteristics of community colleges, such as cultural affluence, technological orientation, and transfer emphasis that distinguish among community colleges and between community colleges and four-year colleges, and that are somewhat associated with the differential characteristics of students attending diverse community colleges.

More is known about the students than about the institutions, and what *is* known is problematical. This is evident from the generalizations that follow, based on comparisons of two- and four-year college students.

Those who attend community colleges show less measured academic aptitude and less academic motivation, as exhibited by such factors as the late decision to attend college, lack of interest in being there, and uncertainty about completing their program. They come from a broader, but generally lower, socioeconomic status. They are less introspective, less self-directed toward articulated goals, and less knowledgeable about alternative goals, whether in reference to careers or education; they are, moreover, less likely to realize their goals. They show less interest in ideas and abstractions and are generally less intellectually disposed and less autonomous in their thinking and attitudes; they are also less prone to change on these dimensions. They show less originality, fewer signs of leadership, and less involvement with college activities, whether extracurricular or community. They are much less likely to persist in college beyond two years and more likely to take more than four years to obtain their baccalaureate degree if they do transfer to a four-year college.

The findings summarized are not necessarily negative by implication. More needs to be known about the meaning of these findings and the ultimate attainments and behavior of community college students before such a judgment is warranted. Also community college students are not all of a kind. There is a great deal of diversity among community college student bodies on the traits enumerated, and also a great deal of overlap between two- and four-year college students on these same traits.

Nevertheless, the findings *are* problematical on two counts: (1) they suggest that a number of characteristics shared by many community college students can hinder the realization of the potentials of the students, including their potential contribution to society; and (2) they suggest that different characteristics of the colleges can have an impact affecting the traits and success of students. We come, then, full circle: community colleges cannot realize their own potential or sufficiently help their diverse students to realize theirs until they have a clear understanding of the dynamics of their various institutional characteristics and programs and the effects of these elements on their students and the larger community. This entails, in turn, consistent and comprehensive research and evaluation.

A start in this direction — after obtaining research personnel — is to determine the criteria that will represent the desired outcomes of the community college. Beginning criteria might well include the realization of student or institutional potential; the attainment of student goals such as ability to transfer to a four-year college, vocational competency, or general knowledge; the attainment of institutional goals such as the development of critical thinking and social awareness among students; or the achievement of the specified behavioral objectives of a program or course.

The demonstration of the criteria may begin with the posing of key questions. For example, does the community college make a difference in the value, attitudes, and attainments of its students? Does it influence different groups of students in the same way, such as those who are unmotivated academically, who are of less or very high academic aptitude, minority students, or those who enter college with vague or unrealistic goals? Does the community college influence all of its students, even those who remain enrolled for only a short time? Or do "successful" students progress in spite of the college? If the college makes a difference, how? What critical combination of institutional, faculty, student, and other factors lead to what results? To what extent are the processes leading to certain outcomes generalizeable and replicable for use by others? For the future, what are the most effective strategies to use in the comprehensive evaluation of community colleges?

Answers to these questions must await subsequent discussion, when they can be treated in some detail. For the moment, increased awareness among faculty administrators and funding agencies of the problems to be researched is urgent. Equally urgent is consideration of the means to muster the resources for the research and to encourage its use as it takes place. Precedents are shaping up for this kind of research, evaluation, and subsequent development.

Under way at the Center for the Study of Evaluation at the University of California at Los Angeles is a nationwide study of freshmen, juniors, and graduates from some 75 colleges and universities. It focuses on institutions as well as individuals. Criterion variables derived primarily from an omnibus questionnaire include measures of the following: the amount of involvement in cultural, political, religious, and educational activities; knowledge and awareness of social issues; attitudes toward social issues and social changes; evaluation of undergraduate and postgraduate educational experiences, socioeconomic and cultural background; verbal aptitude; and intellectual and emotional disposition. Contextual variables (institutional characteristics and educational processes) include measures of: campus environment, intellectualism, morale, alienation, discipline, peer group patterns, administrative styles, and demographic features; faculty orientation and teaching modes; and learning styles. Objectives of the study include: the consideration of evaluation strategies; outputs of various types of institutions and institutional programs; the delineation of factors contributing to the output or criteria; and consequent information useful in planning the future directions of higher education on an institutional, regional, and national basis.

The ERIC Clearinghouse for Junior Colleges has initiated a study of the impact of three different types of community colleges on their students. Although this study is on a much smaller scale than the national study, its design and comprehensiveness (comparable in many ways to the national study) are such that it stands to reveal much useful information and many strategies of the type urged in this discussion. Also, one of the anticipated values of this community college evaluation is the deliberate involvement of the colleges' staff in all aspects of the study. In addition to the data gained about student change, tested research designs will be disseminated through the Clearinghouse's publications series.

Both of these projects have great relevancy for the extensive study of community colleges now being proposed jointly by the Center for the Study of Evaluation and the League for Innovation in Community Colleges, which will follow many of the lines of the on-going evaluation of four-year colleges and universities. All of these projects include extensive and intensive dissemination and development activities. Together they promise a quality of evaluation and development throughout higher education that is without precedent.

The ultimate worth of research activities of this sort, however, is dependent on research and evaluation efforts of the many individual colleges in America, whether or not they participate in the projects described. Here, again, a model of widely-based institutional participation in evaluation and development is under way. The Regional Education Laboratory for the Carolinas and Virginia has established a program for Educational Development Officers that is already functioning in a number of participating community colleges. The intent is that the EDO in each college will be more than the institutional research officer familiar to many educators. He will make use of existing research to develop further research and evaluation in his own institution. In collaboration with the administration, his objectives are to uncover problems, suggest solutions, and generate ideas helpful to the highest level of decision-making and implementation regarding present and future programs in the college.

Sufficient financial support, continued collaboration among researchers, and receptivity in the college will surely bring these current evaluative efforts to fruition and encourage their extension. Appropriate developmental reform in community colleges, as in all of higher education, can come in no other way.

BIBLIOGRAPHY

1. Astin, A. W., Panos, R. J., and Creager, J. A. "National Norms for Entering College Freshmen – Fall, 1966." *ACE Research Reports, 2 (1).* Washington: American Council on Education, 1967.
2. Baird, L. J., and Holland, J. L. "The Flow of High School Students to Schools, Colleges, and Jobs." *ACT Research Reports, 26.* Iowa City: American College Testing Program, 1968.
3. Berg, E. H., and Axtell, D. *Programs for Disadvantaged Students in California Community Colleges,* Oakland, California: Peralta Junior College District, 1968.
4. Clark, B. R. *The Open Door College.* New York: McGraw-Hill, 1960.
5. Cohen, A. M. *Dateline '79: Heretical Concepts for the Community College.* Beverly Hills: Glencoe, 1969.
6. Cohen, A. M. *The Relationships Among Student Characteristics, Changed Instructional Practices, and Student Attrition in Junior College.* U.S.O.E. Project No. 8-I-055. Washington: U.S. Office of Education, Bureau of Research, 1969.
7. Cross, K. P. *The Junior College Student: A Research Description.* Princeton: Educational Testing Service, 1968.
8. Hills, J. R. "Transfer Shock: The Academic Performance of the Junior College Transfer." *Journal of Experimental Education,* 1965, 33:210-215.
9. Hoyt, D. P., and Munday, L. "Academic Description and Prediction in Junior Colleges." *ACT Research Reports, 10.* Iowa City: American College Testing Program, 1966.
10. Knoell, D. M. *A Study of the College-going Behavior of Urban High School Graduates, with Particular Attention to Black Youth Not Now in College.* Washington: American Association of Junior Colleges, 1969. (Mimeo)
11. Knoell, D. M., and Medsker, L. L. *From Junior to Senior College: A Rational Study of the Transfer Student.* Washington: American Council on Education, 1965.
12. MacMillan, T. F. *Establishing a Predictive Model for Early Recognition of Potential Community College Student Attrition.* Unpublished doctoral dissertation, University of California, Berkeley, 1969.
13. MacMillan, T. F., Director, Norcal Project, Phase I: Final Report. Napa College, California, 1969. (Mimeo)
14. Medsker, L. L., and Trent, J. W. *The Influence of Different Types of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels.* Berkeley: Center for Research and Development in Higher Education, University of California, 1965.
15. Panos, R. J. "Some Characteristics of Junior College Students." *ACE Research Reports, 1 (2).* Washington: American Council on Education, 1966.
16. Richards, J. M., Jr., and Braskamp, L. A. "Who Goes Where to Junior College?" *ACT Research Reports, 20.* Iowa City: American College Testing Program, 1967.
17. Richards, J. M., Jr., Rand, L. M., and Rand, L. P. "A Description of Junior Colleges." *ACT Research Reports,* 5. Iowa City: American College Testing Program, 1965.
18. Richards, J. M., Jr., Rand, L. P., and Rand, L. M. "Regional Differences in Junior Colleges." *ACT Research Reports,* 9. Iowa City: American College Testing Program, 1965.
19. Tillery, H. D. *Differential Characteristics of Entering Freshmen at the University of California and Their Peers at California Junior Colleges.* Unpublished doctoral dissertation, University of California, Berkeley, 1964.
20. Trent, J. W., and Medsker, L. L. *Beyond High School: A Psychosociological Study of 10,000 High School Graduates.* San Francisco: Jossey-Bass, 1968.

Abstracts of documents processed in the ERIC system may be found in *Research in Education (RIE)*, a publication of the U.S. Department of Health, Education and Welfare. *RIE* may be ordered from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 for $1.75 per single copy or $21.00 for an annual subscription of 12 issues. *RIE* is cumulated annually and semi-annually.

A companion volume to *RIE* is *Current Index to Journals in Education (CIJE)*, an announcement service that catalogs and indexes journal and periodical literature in the field of education. More than 200 educational journals are included. *CIJE* may be ordered from CCM Information Sciences, Inc., 866 Third Avenue, New York, New York 10022 for $3.50 per single copy or $34.00 for an annual subscription of 12 issues.

All entries listed by ED (ERIC Document) in the bibliography of each *Junior College Research Review* are available in microfiche (MF) or hardcopy (HC) from ERIC Document Reproduction Service, National Cash Register Company, 4936 Fairmont Avenue, Bethesda, Maryland 20014. Payment must accompany orders totaling less than $5.00 and must include a handling charge of $.50 plus state sales tax where applicable.

In addition to processing documents for the ERIC system, the Clearinghouse produces its own publications, including Monographs (in-depth studies or interpretations of research on topics related to junior colleges) and the *Junior College Research Review*, which are available from the American Association of Junior Colleges; Topical Papers (research models designed for junior college implementation), which are available from the UCLA Student's Store-Mail Out, 308 Westwood Plaza, Los Angeles, California 90024; and Specialized Bibliographies, the sources of which will be supplied by the Clearinghouse upon request. Titles and price lists of the foregoing publications are also available from the Clearinghouse.

ERIC CLEARINGHOUSE FOR JUNIOR COLLEGES

Arthur M. Cohen, Director and Principal Investigator

Advisory Board

LOUIS W. BENDER
Director, Bureau of Community Colleges
Commonwealth of Pennsylvania

SIDNEY BROSSMAN
Chancellor
California Community Colleges

DANIEL FADER
Associate Professor of English
University of Michigan

EDMUND J. GLEAZER, JR.
Executive Director
American Association of Junior Colleges

C. WAYNE GORDON
Associate Dean
Graduate School of Education, UCLA

ROBERT M. HAYES
Professor, School of Library Science, UCLA
Director, Institute of Library Research

JOHN LOMBARDI
Assistant Superintendent Emeritus, Junior Colleges
Los Angeles City Schools

LORRAINE MATHIES
Head, Education and Psychology
Library, UCLA

LOUIS C. RIESS
President, California Junior
College Faculty Association, Inc.

JOHN E. ROUECHE
Regional Education Laboratory
for the Carolinas and Virginia

ROBERT VOSPER
University Librarian
UCLA

The Clearinghouse operates under contract with the U.S. Department of Health, Education and Welfare, Office of Education.

JUNIOR COLLEGE RESEARCH REVIEW

Dale Gaddy, Editor
ERIC Clearinghouse for Junior Colleges
Room 96, Powell Library
University of California
Los Angeles, California 90024

Copyright 1969

American Association of Junior Colleges
1315 Sixteenth Street, N.W.
Washington, D.C. 20036

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY AMERICAN ASSOCIATION OF JUNIOR COLLEGES TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE U.S. OFFICE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT·OWNER."

NON-PROFIT ORG.
U.S. POSTAGE
PAID
LOS ANGELES, CALIF.
PERMIT NO. 12378

4/2